

ABSTRACT OF THE DISCLOSURE

The invention encompasses a method of incorporating nitrogen into a silicon-oxide-containing layer. The silicon-oxide-containing layer is exposed to a nitrogen-containing plasma to introduce nitrogen into the layer. The nitrogen is subsequently thermally annealed within the layer to bond at least some of the nitrogen to silicon within the layer. The invention also encompasses a method of forming a transistor. A gate oxide layer is formed over a semiconductive substrate. The gate oxide layer comprises silicon dioxide. The gate oxide layer is exposed to a nitrogen-containing plasma to introduce nitrogen into the layer, and the layer is maintained at less than or equal to 400°C during the exposing. Subsequently, the nitrogen within the layer is thermally annealed to bond at least a majority of the nitrogen to silicon. At least one conductive layer is formed over the gate oxide layer. Source/drain regions are formed within the semiconductive substrate, and are gatedly connected to one another by the at least one conductive layer. The invention also encompasses transistor structures.

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